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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,376	11/17/2003	Niall D. McDonnell	10559-910001 / P18019	4375
20985 7590 01/22/2008 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER PHAM, BRENDA H	
			ART UNIT 2616	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/716,376

Applicant(s)

MCDONNELL, NIALL D.

Examiner

Brenda Pham

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 17-27 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-10, 17-27, 31-35 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Brenda A. Pham 1/17/08

**BRENDA PHAM
PRIMARY EXAMINER**

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-10, 17-27, 31-35 are pending in the application. Claims 31-35 are newly added.

Claim Objections

2. Claims 17-21 are objected to because of the following informalities:

Claim 17, "a machine-readable medium" should be amended to "a computer-readable medium";

Claims 17 and 19-22 "machine" should be amended to "computer". Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 17-22, 23-27, 31-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A computer program product" recited in claims 17-27, 31-35 is defined in the specification as "an information carrier" or "a propagated signal" which made the claims non-statutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 6-10, 17-27, 31-35 are rejected under 35 U.S.C. 102(e) as being anticipated by **Simpkins et al (US 6,931,002 B1)**.

Regarding claims 1, 3, 8-10 17, 19, 23-24, 31-35, **Simpkins et al** discloses system and method comprising (referring to figures 4-8):

receiving frames partitioned into multiple timeslots (28 and 29);

reading a timeslot lookup table including an entry that specifies an assignment corresponding to a timeslot **(TSI control function 43 for reading address of the shared memory for a TDM packet and the packet switch control function 44 for reading the address of the input timeslot for a packet logical port)**; and

storing data associated with a particular timeslot in a memory location based on the assignment;

Simpkins et al teach “if the input time slot belongs to a TDM logical port, the address of the shared memory 40 is selected from the TSI control function 43. If the input time slot belongs to a packet logical port, the address of the shared

memory 40 is selected from the packet switch control function 44." (Col. 7, line 10-45).

Simpkins et al further teach, with data from a particular channel included in timeslots having a data assignment stored in contiguous memory locations. **Simpkins et al** teach "The hybrid switch 20 connects to each of one or more I/O channel cards 22 using two point-to-point interconnections. These point-to-point interconnections are used to transport TDM data and packet data between the hybrid switch 20 and to I/O channel card 22...The switch 20 and the I/O channel card 22 exchange DEUs in a space division multiplexed manner over the point-to-point connections between the switch 20 and the I/O channel cards 22...A DEU containing TDM switched data is called a TDM DUE, and a DEU containing packet switched data is called a packet DEU." (Col. 47-67).

Simpkins further teach "The cell memory 57 provides storage for both TDM and ATM data traffic in a fully parallel format. All bytes of the given DEU are stored at the same address in cell memory 57" (Col. 9, line 24-34, FIG. 4 & 8).

Regarding claims 2, 6, 18, 20 and 25, **Simpkins et al** further teach wherein the assignments include a voice timeslot, an unassigned timeslot, and a data time slot (**FIG. 7**, Col. 6-7 line 60-67, 1-10, respectively).

Regarding claims 7, 21, 22, 26 and 27, Simpkins et al further teach wherein storing the data comprising:

storing the data included associated with voice timeslots in a first memory;

storing the data associated with data timeslot in a second memory (**"FIG. 6. The shared memory 40 is a random access memory (RAM) and is divided into two sections, a TDM data memory 48 is reserved solely for TDM data, and the packet data memory 49 is reserved solely for packet data. Enough of the shared memory 40 is set aside as the TDM data memory 48 to accommodate the scenario when each time slot 29 of each input frame 28 of each input port 27 has TDM data."** Col. 6, line 60-67); and

discarding the data associated with unassigned timeslots (**"A null DEU carries no data, but serves as a placeholder in the port module interface frame. If the time slot is found to contain a packet DEU, the DEU will be enqueued...If the DEU is found to contain a null DEU, the DEU will be discarded"** (Col. 8, line 37-45).

NOTE: Examiner does not give patentable weight to "configured to" clauses because such language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation (see Claims 31-32, 34-35)

Allowable Subject Matter

7. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 11/20/07 have been fully considered but they are not persuasive. REMARKS, page 10, Applicant argued that "Simpkins does not describe 'a particular channel included in timeslots having a data assignment stored in contiguous memory locations', as claimed". Examiner respectfully disagrees because Simpkins et al indeed teaches this arguable limitation.

As explained in the Office Action, Simpkins et al teaches in FIG. 4 and FIG. 8 that the hybrid switch 20 connects to each of one or more I/O channel cards 22 using two point-to-point interconnections. These point-to-point interconnections are used to transport TDM data and packet data between the hybrid switch 20 and the I/O channel cards 22...The port module interfaces convey both TDM data and packet data between the hybrid switch 20 and the I/O channel card utilizing a synchronous, time-slotted frame format...One time slot within the port module interface frame is called a data exchange unit (DEU). A DEU containing TDM switched data is called a TDM DEU, and a DEU containing packet switched data is called a packet DEU...The cell memory 57 provides storage for both TDM and ATM data traffic in a fully parallel format. All bytes of a given DEU are stored at the same address in cell memory.

Examiner believes Simpkins discloses all the features of the claimed subject matter. Therefore, the rejection stands.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

January 17, 2008
Brenda Pham



BRENDA PHAM
PRIMARY EXAMINER